#### FRIEDMAN & BRUYA, INC.

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: January 17, 1996 Date Received: January 11, 1996

Project: Metro Self Monitor, PO #M51907 Date Samples Extracted: January 15, 1996 Date Extracts Analyzed: January 16, 1996

### RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, AND ZINC Samples Processed Using Method 3005 Samples Analyzed Using Method 6010

Results Reported as mg/L (ppm)

Sample ID	Chromium	Copper	<u>Nickel</u>	Zinc
M51907	0.69	0.78	0.54	0.06
Method Blank	<0.05	< 0.05	< 0.05	<0.05

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#### **ENVIRONMENTAL CHEMISTS**

Date of Report: January 17, 1996 Date Received: January 11, 1996

Project: Metro Self Monitor, PO #M51907

#### QUALITY ASSURANCE RESULTS FOR CHROMIUM, COPPER, NICKEL, AND ZINC Samples Processed Using Method 3005 Samples Analyzed Using Method 6010

Laboratory Code: 65734 (Duplicate)

				Relative	
	Reporting	Sample	Duplicat	e Percent	Acceptance
Analyte:	Units	Result	Result	Difference	Criteria
Chromium	mg/L (ppm)	0.69	0.71	3	0-20
Copper	mg/L (ppm)	0.78	0.77	1	0-20
Nickel	mg/L (ppm)	0.54	0.56	4	0-20
Zinc	mg/L (ppm)	0.06	0.07	15 a	0-20
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Laboratory Code: 65734 (Matrix Spike)

Reporting	Spike	Sample	% I	Recoverv	Acceptance	Relative Percent
Analyte: Units	Level	Result	MS	MSD	Criteria	Difference
Chromium mg/L (ppm)	2.5	0.69	99	92	80-120	7
Copper mg/L (ppm)	2.5	0.78	95	91	80-120	4
Nickel mg/L (ppm)	5.0	0.54	98	94	80-120	4
Zinc mg/L (ppm)	2.5	0.06	99	97	80-120	2

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery MS	Acceptance Criteria		
Chromium	mg/L (ppm)	2.5	98	80-120		
Copper	mg/L (ppm)	2.5	97	80-120		
Nickel	mg/L (ppm)	5.0	98	80-120		
Zinc	mg/L (ppm)	2.5	101	80-120		

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

FORMS/COC

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# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

January 17, 1996

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on January 11, 1996 from your Metro Self Monitor, PO #M51907 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson Chemist

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Enclosures FAX: 382-7335 ACU0117R.DOC

# FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

January 17, 1996

#### INVOICE # 96ACU0117-1 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M51907: Results of testing requested by Gerry Thompson, Project Manager for material submitted on January 11, 1996.

1 water sample analyzed for Chromium,	
Copper, Nickel, and Zinc @ \$65 per sample	\$ 65.00
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Amount Due	\$ 65.00